

Toy Stories

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Toys are the most frivolous things in the world and, in some ways, the most essential. No culture is entirely without toys; where mass-produced and mass-marketed toys are absent, children transform everyday objects into games, puzzles, and imagined friends and enemies. Toys can be objects of solitary attention and entertainment or, far more often, centerpieces of social interaction. Even animals play with toys.

Over the past century, toys have become the focus of a massive industry, the opening wedge for the commoditization of childhood, icons of cultural controversy, subjects of serious (and not-so-serious) scholarship, and sometimes even tools for psychological research.

Today's toys are freighted with meanings, many of them far heavier than any plaything should have to bear. As researcher and author Brian Sutton-Smith asserts in his books *Toys as Culture* and *The Ambiguity of Play*, toys mean many different things to many different people. When those meanings rub up against each other, they produce heated controversies: over Barbie's waist size, G.I. Joe's guns, or the propriety of prostitution in *Grand Theft Auto: Vice City*.

As a result, toys have become high-stakes playthings. They provide children with fun and fantasy while teaching hard-edged social norms; they promise parents peace of mind while bringing the chaos of popular consumer culture into the home; they produce massive profits for multinational conglomerates whose public relations offices promise to put the child's interests first. To this whirlpool of conflicting interests and ideas, psychological scientists have added a few drops of their own.

Child's Play

If it is true that no one ever steps into the same river twice, it is also true that no child ever plays with the same toy more than once. As the child grows, the play changes; and as the play changes, the toy is transformed.

Jean Piaget's 1952 classic, *Play, Dreams, and Imitation in Childhood*, launched the inquiry into children's changing styles of play. Today, psychologists such as Catherine Tamis-LeMonda of New York University follow in his footsteps, tracing the evolution of play from sensorimotor exploration to non-symbolic manipulation to symbolic play, exploring the blurry borderlines between Piaget's clear-cut stages and showing how each stage contains a multitude of minor shifts that may eventually lead to revolutions.

Tamis-LeMonda's work traces a series of shifts in the nature of play during the second and third year of life, when symbolic or "pretend" play is emerging: from self- to other-directed, from literal to abstract, from single acts to sequenced acts, and from agentive to vicarious. Although much of the impetus for these shifts comes from the child, parents are not just passive observers. "Even though parents don't realize what they're doing, parents do promote these different levels of play," says Tamis-LeMonda.

Play also helps teach children about social roles, for better and for worse. When a boy learns that certain toys are for girls only, or that certain kinds of violent play are off limits, he is discovering something about the society in which he lives. “It’s teaching children social stereotypes and social norms, both the good and the bad,” says Tamis-LeMonda.

Some psychologists have argued — controversially — that boys’ and girls’ preferences for certain kinds of play are driven by hormonal differences, and that socialization plays a relatively minor role. Gerianne Alexander, a psychologist at Texas A&M University who has published several studies linking toy preferences to prenatal androgen levels, has reported that vervet monkeys show gendered preferences for human toys: female vervets tend to spend more time in contact with dolls, while male vervets tend to spend more time playing with trucks.

Regardless of the roots of gendered toy preferences, it is clear that toys and toy advertising have powerful effects on the ways children construct their gender identities. Girls between the ages of five to eight who are exposed to Barbie dolls feel worse about their bodies than girls exposed to dolls with more realistic physiques, according to a recent study by University of Sussex psychologist Helga Dittmar and her colleagues published in *Developmental Psychology*.

Boys, of course, are influenced by toys as well. In a recent paper in the journal *Sex Roles*, Jennifer Pike and Nancy Jennings reported that boys tended to be particularly strongly influenced by gendered aspects of television advertising. If boys saw an advertising in which only girls were playing with a particular toy, they were much less likely to play with that toy when given the opportunity.

Whether children play with boys’ or girls’ toys has significant effects for the nature of their play, says Isabelle Cherney, a developmental psychologist at Creighton University. Cherney and her colleagues have found that female-stereotyped toys tend to promote the most complex play in 18 to 47 month-olds. But as children grow older, their gendered stereotypes about toys grow stronger. Boys, especially, become increasingly likely to avoid playing with “girl toys,” possibly for fear of social repercussions from their peers.

Parents Pay

Contemplating the endless rows of modern toys, urged on by the advertising-influenced pleas of their offspring, trying to keep in mind the recommendations of teachers and psychologists — not to mention those of friends, peers, and parenting websites — today’s parents face a formidable set of challenges in choosing toys for their children.

Before they even set foot in a toy store, parents and parents-to-be have strong preconceptions about the benefits and connotations of various toys. Elaine Blakemore, a psychologist at Indiana University-Purdue University, Fort Wayne, asked undergraduates to assess the gender and potential benefits of various toys for children’s development. She found that toys judged to be moderately masculine or neutral were seen as having the most positive impact on development.

On the other hand, “both strongly feminine and strongly masculine toys seem to be associated with the worst aspects of gender roles: i.e., a focus on appearance in girls and violence in boys,” says Blakemore, who is currently conducting further research on parents’ attitudes about gender-typed toys and their own children.

The purchase of a toy is not, of course, the end of a parents' involvement in how the toy is used and perceived by the child. A toy is ultimately nothing more than an opportunity for play, and parents are constantly encouraging, constraining, and participating in the play of their children.

The joint play of parents — both mothers and fathers — and children can have long-term effects on children's development, according to a recent study of two and three-year old children in low-income families by Tamis-LeMonda and her colleagues. Supportive parenting at 24 months of age, as evidenced during a 10-minute play session, predicted children's performance on standardized tests of cognition and language a year later.

In less happy circumstances, play can reveal problems in the relationships between parents and children. Kristin Valentino and her colleagues at the University of Rochester's Mt. Hope Family Center have found that children in abusive families tend to engage in more imitative play and less independent play, and their mothers are less likely to get children's attention verbally during play and instead rely on physical interventions.

Toy-Makers Today

It's not just parents, educators, and psychologists who care about the psychology of children's play. Toy marketers and designers care too — and not just when they are building and selling so-called “educational” toys.

In fact, says Stanford University psychologist Barbara Tversky, most researchers working at the intersection of toys and psychology are probably in industry. Toy designer Barry Kudrowitz, a graduate student at MIT who has developed toys for Hasbro, says familiarity with children's psychology is critical to toy design, even though many toy designers lack formal training in psychology.

“Before brainstorming, the designer should know what types of behaviors are typical for that age group, what media properties are popular; the social, mental, and physical abilities of the age group; and what types of play are most common,” says Kudrowitz.

Toy designers are beginning to pay more attention to the findings of psychologists. At MIT, Kudrowitz teaches a toy course that focuses on developing toys to benefit children and their communities. Next year's course will include a lecture on developmental psychology by Kudrowitz and Monty Stambler, a psychologist who runs his own toy company. Developmental psychology is also part of the curricula at the Fashion Institute of Technology in New York, where the United States' first toy-design degree program was founded in the late 1980s.

Of course, not all psychological research on children's attitudes toward toys is intended to benefit children, parents, or communities; some is directly focused on the toy manufacturers' bottom line. Stephen P. Hogan, a marketing researcher at the University of Brighton, describes the toy industry as “full of ethical dilemmas with no clear answers.”

Toy companies are no different from other businesses in their need to turn a profit; but unlike many other businesses, their key consumers are poorly equipped to judge the veracity of their claims or the value of their products. Equally unusual is the fact that the toy industry markets directly to consumers who usually depend on third parties — their parents — to purchase products. The result, says Hogan, is an ambiguous situation in which toy companies argue they are protecting children's “consumer rights”

through direct advertising, while social critics argue they are exploiting a vulnerable population.

Toying with Development

Under the glare of so much attention from parents, children, toy-makers, and cultural critics, toys can seem central to the lives of children and crucial determinants of their futures. But buying “Baby Einstein” does not a baby Einstein make, say psychologists. Toys are opportunities for play, for exploration, and for social interaction; an educational toy that promotes these will have a positive effect, but so will an everyday household object — if used in the right way.

“Infants learn from people in a way they don’t learn from machines,” says Patricia Kuhl, co-director of the Institute for Learning and Brain Sciences at the University of Washington. Kuhl and her colleagues recently conducted a study in which infants were exposed to the Mandarin language either through social interaction with a Mandarin speaker or through exposure to visual and auditory recordings.

Infants’ ability to recognize sounds not present in their native language usually declines sharply between six and 12 months of age. Kuhl and her colleagues found that interaction with a Mandarin speaker helped reverse the usual decline, whereas exposure to a DVD of a Mandarin speaker had no effect. The conclusion is clear, she says: “Babies need people to learn.”

“The learning opportunities for children are everywhere in our world and toys are only one set of those materials,” says Tamis-LeMonda, who points out that children seem to find ample opportunities for play and learning even in cultures where Western-style mass-marketed toys are rare. The anthropologist Jean-Pierre Rossie, an affiliate of the Stockholm International Toy Research Centre, describes the children he has studied in North African and Saharan countries as “masters in the re-utilization of waste material,” crafting intricate toys from detritus and everyday household objects.

The subjects of Rossie’s research were likely more skilled in making ad-hoc toys than many children who grow up with toy-chests full of mass-marketed playthings, but they were hardly unique in their ability to transform mundane and workaday objects into opportunities for play. Kids are notoriously liable to find a cardboard box more fascinating than the expensive toy it contains.

This interest in playing with everyday objects may reflect a desire to imitate adults and, by imitating, to explore the social values and roles of their societies, says Andrew Meltzoff, a developmental psychologist at the University of Washington. Through imitating adults, he says, children learn who they are.

“Toy manufacturers strive mightily to make toys that attract infants and young children with lights and sounds, buzzes and whistles,” says Meltzoff. “They can make things that grab the child’s attention, but the children’s hearts lie with the pots and pans, the tea cups and telephones that they see their parents use.”

Playtime Over?

There was a groundswell of interest in research on toys and play in the 1970s and 1980s, but sponsorship for such research has waned significantly since then, psychologists say — at the same time that play itself has come under threat from educators and policymakers who see it as a distraction from more important tasks.

“I have looked in vain for any foundations or agencies that would be willing to fund longitudinal study of the effects of play with technology-enhanced toys,” says Doris Bergen, co-director of the Center for Human Development, Learning, and Technology at Miami University of Ohio and co-editor of *Play*

From Birth to Twelve.

Although Bergen recently received a small grant from Fisher-Price to study its “Laugh and Learn” product line, she says sustained support for research on the impact of toys on child development — such as the kind some European governments provide — is lacking in the United States. Professional societies such as The Association for the Study of Play have helped maintain an active community of toy researchers, but “funding for toy and play research is almost nonexistent,” she says.

Opportunities for children to play, too, may be shrinking. Jerome Singer and Dorothy Singer, co-directors of the Yale University Family Television Research and Consultation Center and strong advocates of the benefits of play, recently noted “a trend among some government agencies and school administrations to devalue if not actually to ban children’s play from the classroom.”

To some educators and lawmakers, play seems like a distraction from the more important task of preparing workers for the knowledge economy. The Singers have argued that this approach is myopic. Imaginative play, they suggest, is not only fun but also crucial for the development of such high-level human skills as decision-making, contextualizing, and creativity.

Perhaps expectations for what toys can do to children, for better or worse has been overblown. Play theorist Sutton-Smith has criticized psychological research on play for what he sees as its “thinly disguised rationalistic and moralistic concern with the way parents socialize their children into higher levels of complexity.” Sutton-Smith wants to remind us that not all play has a function, not all toys are educational, and not all interactions between parents and children necessarily aim to produce productive members of society. Sometimes they’re just fun.